

CLAIMS

1. An RC oscillator circuit, comprising
  - a current generator for generating a charge current (IPOSC1);
  - an integrator (1) with an input (2), which is coupled to the current generator, and with an output (4);
  - a comparator (7) comprising a first input which is connected to the output (4) of the integrator (1), and comprising a second input for supplying a reference threshold (VTH);
  - a clock pulse generator (9) which is connected to an output of the comparator (7); and
  - a reference generator (8), designed for generating the reference threshold (VTH), depending on a supply voltage of the RC oscillator circuit.
2. The RC oscillator circuit according to claim 1,  
  
characterised in that  
  
the integrator (1) comprises at least one capacitor (C1).
3. The RC oscillator circuit according to claim 2,  
  
characterised in that  
  
the integrator (1) comprises a discharge device (32, 33) for discharging the capacitor (C1), of which there is at least one.
4. The RC oscillator circuit according to claim 2 or 3,

characterised in that

the integrator (1) comprises two capacitors (C1, C2) which are alternately charged and discharged.

5. The RC oscillator circuit according to any one of claims 2 to 4,

characterised in that

the reference generator (8) is coupled to the integrator (1) such that the reference threshold (VTH) is generated depending on the voltage (CAP1) above the capacitor (C1), of which there is at least one.

6. The RC oscillator circuit according to any one of claims 1 to 5,

characterised in that

the reference generator (8) comprises an integrating amplifier (37) comprising an input which is coupled to the integrator (1), and comprising an output for supplying the reference threshold (VTH) depending on the integrated voltage above the capacitor (C1), of which there is at least one.

7. The RC oscillator circuit according to claim 6,

characterised in that

the reference generator (8) comprises a differential amplifier (37) which is designed such that, at its

output, the reference threshold (VTH) is provided, depending on the difference between a voltage (VTH2) derived from the supply voltage, and the voltage (CAP1) above the capacitor (C1), of which there is at least one.

8. The RC oscillator circuit according to any one of claims 1 to 7,

characterised in that

the current generator comprises a voltage divider (16, 17) with an input which is connected to the supply potential connection (18), and with an output which is connected to a voltage converter / current converter (19, 21, 22).

9. The RC oscillator circuit according to claim 8,

characterised in that

the voltage converter / current converter (19, 21, 22) comprises a resistor (22).

10. The RC oscillator circuit according to any one of claims 1 to 9,

characterised in that

the current generator (16, 17, 19, 21, 22) is coupled to the integrator (1) by way of at least one current mirror (23).